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=> d his

     (FILE 'HOME' ENTERED AT 14:45:35 ON 31 JUL 2008)

     FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPATOLD, USPAT2' ENTERED AT
     14:48:23 ON 31 JUL 2008
L1       108320 S (CRUCIBLE#)
L2          855 S (OPAQUE)(6A)(SIDE(2W)WALL# OR SIDE(4A)WALL#)
L3        70175 S (INFRARED(3W)RADIAT?)
L4           56 S (TRANSPAREN? OR CLEAR?)(8A)(BOTTOM(8A)CRUCIBLE#)
L5            7 S L1 AND L2
L6        77730 S (TRANSPAREN? OR CLEAR?)(8A)(BOTTOM# OR CRUCIBLE(8A)BOTTOM# OR
L7          338 S L1 AND L6
L8            1 S L1 AND L2 AND L3 AND L6

=> d l1 abs,bib

L1   ANSWER 1 OF 108320  HCAPLUS  COPYRIGHT 2008 ACS on STN
AB   The crystal growth of boron-rich compds. of the Al-Mg-B system from high
     temperature Al solns. was studied.  The purities of starting materials were as
     follows: Al, 4N; Mg, 4N; B, 99.5%.  Each of the mixts. with an excess
     quantity of Al was placed in an alumina crucible, and heated by
     an elec. furnace in an argon atmospheric  The crystals were grown by cooling
high
     temperature aluminum melts, which had been soaked for 2 or 3 h at 1500°C.
     The grown crystals were separated by dissolving an excess of aluminum metal
     with hydrochloric acid.  The boron-rich crystals thus obtained were examined
     by Video microscope, SEM, EDX, XRD and chemical anal., etc.  The crystals
     were AlMgB14, AL.apprx.1.4Mg.apprx.0.4B22 (γ-AlB12 type) and
     α-AlB12.
AN   2008:907528  HCAPLUS
TI   Crystal growth of boron-rich compounds in the Al-Mg-B system
AU   Tanaka, Minoru; Higashi, Iwami
CS   Materials Group, Tokyo Metropolitan Industrial Technology Research
     Institute, Tokyo, Japan
SO   Kenkyu Hokoku - Chiho Dokuritsu Gyosei Hojin Tokyo Toritsu Sangyo Gijutsu
     Kenkyu Senta (2007), 2, 58-61
     CODEN: KHCDBB; ISSN: 1881-8676
PB   Chiho Dokuritsu Gyosei Hojin Tokyo Toritsu Sangyo Gijutsu Senta
DT   Journal
LA   Japanese


=> d l5 1-7 abs,bib

L5   ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
AB   The bottom of the crucible has, parallel to an axis appreciably
     perpendicular to the bottom, properties of thermal transfer much higher
     than those of the side walls.  The bottom can be transparent with the
     infra-red radiation, the side walls being
     opaque with the infra-red radiation.  The bottom can be out of
     amorphous silica, the side walls being out of
     opaque quartz ceramics.  The crucible can also be out of
     graphite.  The device can comprise a graphite felt, laid out between the
     bottom of the crucible and the means of cooling, and of the
     means of compression of the graphite felt.  It is thus possible to define
     a heat gradient ranging between 8°C/cm and 30°C/cm in the
     liquid phase.
AN   2004:876080  HCAPLUS
DN   141:340808
TI   Crucible for a device for manufacture of a block of crystalline
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material, and process of manufacture
IN Einhaus, Roland; Lissalde, Francois; Rivat, Pascal
PA Apollon Solar, Fr.; Cyberstar; Silac
SO Fr. Demande, 16 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2853913	A1	20041022	FR 2003-4803	20030417
	FR 2853913	B1	20060929		
	WO 2004094704	A2	20041104	WO 2004-FR894	20040409
	WO 2004094704	A3	20041216		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1613795	A2	20060111	EP 2004-742479	20040409
	EP 1613795	B1	20070103		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	BR 2004009464	A	20060418	BR 2004-9464	20040409
	CN 1774526	A	20060517	CN 2004-80010351	20040409
	JP 2006526751	T	20061124	JP 2006-505792	20040409
	AT 350519	T	20070115	AT 2004-742479	20040409
	ES 2279402	T3	20070816	ES 2004-742479	20040409
	US 20060144326	A1	20060706	US 2005-550456	20050926
	IN 2005CN02671	A	20070831	IN 2005-CN2671	20051017
	NO 2005005454	A	20051117	NO 2005-5454	20051117
PRAI	FR 2003-4803	A	20030417		
	WO 2004-FR894	W	20040409		

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 7 JAPIO (C) 2008 JPO on STN
AN 1997-157082 JAPIO
AB PROBLEM TO BE SOLVED: To provide a quartz crucible for pulling up a silicon single crystal which has a high rate of single crystallization and is increased in an oxygen dissolution quantity. SOLUTION: The inside surface side parts of the wall body of this quartz crucible for pulling up the silicon single crystal consist of transparent glass layers 11 containing substantially no air bubbles. The outside surface side parts of the wall body consist of opaque glass layers 12 containing many air bubbles. The IR transmittance of the arbitrary parts inclusive of the sidewall part to the curved part 22 and bottom 21 of the crucible 10 is 30 to 80%. The differences in the IR transmittance at the arbitrary plural points in these parts are <=30% and more preferably, the average IR transmittance of the curved part is larger by 5 to 25% than the average IR transmittance of both of the sidewall parts 23 and the bottom 21.
COPYRIGHT: (C)1997,JPO
AN 1997-157082 JAPIO
TI QUARTZ CRUCIBLE FOR PULLING UP SILICON SINGLE CRYSTAL

IN FUKUI MASANORI; TSUJI YOSHIYUKI
PA MITSUBISHI MATERIAL QUARTZ KK
PI JP 09157082 A 19970617 Heisei
AI JP 1995-346493 (JP07346493 Heisei) 19951212
PRAI JP 1995-346493 19951212
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1997

L5 ANSWER 3 OF 7 JAPIO (C) 2008 JPO on STN
AN 1996-301693 JAPIO
AB PURPOSE: To obtain a silicon single crystal with a high oxygen concentration in high yield by forming an outer wall of a quartz crucible of an opaque glass layer and forming an inner wall part of a transparent glass layer and making the transparent glass layer of a curved part thick and the opaque glass layer thin.
CONSTITUTION: In this quartz crucible 10 comprising an inner surface area side part of a wall body made of a transparent glass layer 11 and an outer surface side part of the wall body composed of a foam-containing opaque glass layer 12, the quartz crucible for pulling up a silicon single crystal has a curved part 22 which connects a peripheral wall part 23 of the crucible to a bottom part 21 and has the thickness of the transparent glass layer >=0.5mm thicker than that of the transparent glass layer of the other wall body part. The quartz crucible can be produced by using a conventional crucible production method such as a rotary molding method. Especially, the rotary molding method is industrially advantageous since the quartz glass can be produced at a low cost.
COPYRIGHT: (C)1996,JPO
AN 1996-301693 JAPIO
TI QUARTZ CRUCIBLE FOR PULLING UP SINGLE CRYSTAL OF SILICON
IN TSUJI YOSHIYUKI; IWAMI KOJI
PA MITSUBISHI MATERIAL KUOOTSU KK
PI JP 08301693 A 19961119 Heisei
AI JP 1995-128971 (JP07128971 Heisei) 19950428
PRAI JP 1995-128971 19950428
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1996

L5 ANSWER 4 OF 7 USPATFULL on STN
AB The bottom of the crucible has much greater thermal transfer properties, parallel to an axis substantially perpendicular to the bottom, than those of the side walls. The bottom and side walls are formed by materials having the same main chemical constituents. The bottom can be transparent to infrared radiation and the side walls opaque to infrared radiation. The bottom can be made of amorphous silica and the side walls of opaque quartz ceramic. The crucible can also be made of graphite. The device can comprise a graphite felt, arranged between the bottom of the crucible and cooling means, and compression means of the graphite felt. It is thus possible to define a temperature gradient comprised between 8° C./cm and 30° C./cm in the liquid phase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2006:170894 USPATFULL
TI Crucibel for a device used for the production of a block of crystalline material, and production method
IN Einhaus, Roland, Bourgoin Jallieu, FRANCE
Lissalde, Francois C., Seyssins, FRANCE
Rivat, Pascal, Saint Etienne De Saint Geoirs, FRANCE
PA Apollon Sollar, Paris, FRANCE, F-75017 (non-U.S. corporation)
Cyberstar, Echirolles, FRANCE, F-38130 (non-U.S. corporation)
EFD Induction SA, Seyssinet-Pariset, FRANCE, F-38170 (non-U.S.

corporation)
PI US 20060144326 A1 20060706
AI US 2004-550456 A1 20040409 (10)
WO 2004-FR894 20040409
20050926 PCT 371 date
PRAI FR 2003-4803 20030417
DT Utility
FS APPLICATION
LREP OLIFF & BERRIDGE, PLC, P.O. BOX 19928, ALEXANDRIA, VA, 22320, US
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 312
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 7 USPATFULL on STN
AB Phosphor from the class of the oxynitridosilicates, having a cation M which is doped with divalent europium, and having the empirical formula MSi.sub.2O.sub.2N.sub.2, where M=Sr.sub.1-x-yCa.sub.yEu.sub.x where 0.3≤x+y≤0.725, with a Ca/Eu ratio of >1, the oxynitridosilicate having an emission with a dominant wavelength in the range from 555 to 568 nm.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2006:122578 USPATFULL
TI Highly efficient stable oxynitride phosphor
IN Fiedler, Tim, Munchen, GERMANY, FEDERAL REPUBLIC OF
Jermann, Frank, Munchen, GERMANY, FEDERAL REPUBLIC OF
PA Patent-Treuhand-Gesellschaft fur elektrische (non-U.S. corporation)
Gluhlampen mbH, Munchen, GERMANY, FEDERAL REPUBLIC OF, 81543 (non-U.S. corporation)
PI US 20060103297 A1 20060518
AI US 2005-256567 A1 20051021 (11)
PRAI DE 2004-102004051395 20041021
DT Utility
FS APPLICATION
LREP COHEN, PONTANI, LIEBERMAN & PAVANE, 551 FIFTH AVENUE, SUITE 1210, NEW YORK, NY, 10176, US
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 579
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 7 USPATFULL on STN
AB A method for reducing the concentration of near-surface bubbles in a quartz crucible suitable for growing monocrystalline silicon ingots by the Czochralski method is provided. The method comprises etching the inner surface of the crucible, preferably with an acidic solution, to substantially eliminate or reduce the concentration of near-surface bubbles from the inner surface of the crucible .

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2003:34845 USPATFULL
TI Method of eliminating near-surface bubbles in quartz crucibles
IN Phillips, Richard J., St. Peters, MO, UNITED STATES
Keltner, Steven J., Tega Cay, SC, UNITED STATES
Holder, John D., Lake St. Louis, MO, UNITED STATES
PA MEMC Electronic Materials, Inc. (U.S. corporation)
PI US 20030024467 A1 20030206

AI US 2002-210933 A1 20020802 (10)
PRAI US 2001-309645P 20010802 (60)
DT Utility
FS APPLICATION
LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR, ST LOUIS, MO, 63102
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 542
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 7 USPATFULL on STN
AB A crystal puller for growing monocrystalline silicon ingots according to the Czochralski method includes a housing and a crucible in the housing for containing molten silicon. The crucible has a side wall having a transmittance of at least about 80% generally throughout a light wavelength range of about 500 to about 2500 nanometers. A pulling mechanism is included for pulling a growing ingot upward from the molten silicon. In operation, polycrystalline silicon is charged to the crucible and the crucible is heated to melt the polycrystalline silicon for forming a molten silicon melt in the crucible. A seed crystal is then brought into contact with the molten silicon in the crucible and a monocrystalline silicon ingot is pulled up from the molten silicon.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2002:230455 USPATFULL
TI Crystal puller and method for growing monocrystalline silicon ingots
IN Phillips, Richard Joseph, St. Peters, MO, United States
Drafall, Larry E., St. Charles, MO, United States
McCallum, Kirk D., Warrenton, MO, United States
PA MEMC Electronic Materials, Inc., St. Peters, MO, United States (U.S. corporation)
PI US 6447601 B1 20020910
AI US 2001-811982 20010319 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Hiteshew, Felisa
LREP Senniger, Powers, Leavitt & Roedel
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 578
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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